IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of	:	Customer Number: 52023
	:	
Joshua ALLEN et al.	:	Confirmation Number: 6352
	:	
Application No.: 10/675,726	:	Group Art Unit: 2444
	:	
Filed: September 30, 2003	:	Examiner: N. Donabed
	:	
For: AUTONOMIC SLA BREACH VALUE ESTIMATION		

APPEAL BRIEF

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This Appeal Brief is submitted in support of the Notice of Appeal filed November 14, 2011, wherein Appellants appeal from the Examiner's rejection of claims 24-27, 29-32, 34-37, and 39-44.

I. REAL PARTY IN INTEREST

This application is assigned to IBM Corporation by assignment recorded on September 30, 2003, at Reel 014570, Frame 0190.

II. RELATED APPEALS AND INTERFERENCES

A Decision on Appeal was rendered in the present Application on July 22, 2010. Appellants are unaware of any other related appeals and interferences.

III. STATUS OF CLAIMS

Claims 24-27, 29-32, 34-37, and 39-44 are pending and finally rejected in this Application. Claims 1-23, 28, 33, and 38 have been cancelled. It is from the final rejection of the claims that this Appeal is taken.

IV. STATUS OF AMENDMENTS

The claims have not been amended subsequent to the imposition of the Fourth and Final Office Action dated August 16, 2011 (hereinafter the Fourth Office Action).

V. SUMMARY OF CLAIMED SUBJECT MATTER

1   Referring to Figure 1 and also to independent claim 24, a computer hardware system for

2   estimating a service level agreement (SLA) breach value for a resource 140 is disclosed. The

3   system comprises a performance history database 170 and at least one computer hardware device

4   coupled to the performance history database (page 9, lines 5-6). The performance history

5   database 170 includes historical performance data for the resource 140 (page 9, lines 1-4). The

6   at least one computer hardware device is configured to retrieve the historical performance data

7   for the resource 140 (page 9, lines 6-8), and generate 180 the estimated SLA breach value by

8   processing the historical performance data for the resource 140 (page 9, lines 8-9; page 10, line 7

9   through page 11, line 7).

10   Referring to Figure 1 and also to independent claim 24, a method for estimating a service

11   level agreement (SLA) breach value for a resource 140 is disclosed. Historical performance data

12   for the resource 140 is retrieved from a performance history database 170 (page 9, lines 1-6). In

13   180, the estimated SLA breach value is generated by a computer hardware system by processing

1   the historical performance data for the resource 140 (page 9, lines 6-8). In Figure 3, the

2   estimated SLA breach value is displayed using the computer hardware system (page 9, lines 8-9;

3   page 10, line 7 through page 11, line 7).

4   Referring to Figure 1 and also to independent 34, a machine readable storage having

5   stored therein computer program code for estimating a service level agreement (SLA) breach

6   value for a resource 140 is disclosed. The computer program code, which when executed by a

7   computer hardware system, causes the computer hardware system to perform the following.

8   Historical performance data for the resource 140 is retrieved from a performance history

9   database 170 (page 9, lines 1-6). In 180, the estimated SLA breach value is generated by a

10 computer hardware system by processing the historical performance data for the resource 140

11 (page 9, lines 6-8). In Figure 3, the estimated SLA breach value is displayed using the computer

12 hardware system (page 9, lines 8-9; page 10, line 7 through page 11, line 7).

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

1. Claims 34-37 were rejected under 35 U.S.C. § 101;

2. Claims 24-27, 29-32, and 34-37 were rejected under 35 U.S.C. § 103 for obviousness based upon Nagasawa, U.S. Patent Publication No. 2002/0116234, in view of Betge-Brezetz et al., U.S. Patent Publication No. 2005/0177629 (hereinafter Betge-Brezetz); and

3. Claims 39-44 were rejected under 35 U.S.C. § 103 for obviousness based upon Nagasawa in view of Betge-Brezetz and Monga et al., U.S. Patent No. 7,437,449 (hereinafter Monga).

VII. ARGUMENT

1   **THE REJECTION OF CLAIMS 34-37 UNDER 35 U.S.C. § 101**

2   For convenience of the Honorable Board in addressing the rejections, claims 35-37 stand

3   or fall together with independent claim 34.

4

5   Improper legal standard

6   The Examiner has <u>applied the incorrect standard</u> when determining whether or not claim

7   34 is directed to statutory subject matter. On January 26, 2010, Commissioner Kappos issued a

8   memo entitled "Subject Matter Eligibility of Computer Readable Media" (hereinafter "the

9   Memo"). The Memo focused on the patent eligibility of computer readable medium claims (also

10   called "Beauregard" claims), and relied upon the Federal Circuit decision of In re Nuijten, 500

11   F.3d 1346 (Fed. Cir. 2007).

12

13   However, the claims within In re Nuijten, which were determined to be not directed to

14   statutory subject matter under 35 U.S.C. § 101, were not computer readable medium claims.

15   Instead, these claims were <u>explicitly</u> directed to a signal. The history, at the Board, of the

16   application at issue within In re Nuijten was characterized by the Federal Circuit as follows:

17   As to Claim 15, it found that "[t]he storage medium in claim 15 nominally puts the claim
18   into the statutory category of a 'manufacture'" and thus reversed the Examiner's § 101
19   rejection of that claim. Id. at 1351.
20
21   Notably, the Board <u>reversed</u> a rejection under 35 U.S.C. § 101 of a storage medium claim.

22   Referring to Footnote 6 of In re Nuijten, the Federal Circuit further noted:

23   [FN 6]   Of course, such a signal could be stored for later use, but the result of
24   such storage would be a "storage medium" containing the signal. Such a storage medium

4

1   would likely be covered by allowed Claim 15 of Nuijten's application, which is not
2   before us on appeal. Id. at 1356.
3
4   Thus, the Federal Circuit recognizes that there is a <u>difference</u> between a transitory, propagating
5   signal and a storage medium and that the decision rendered within <u>In re Nuijten</u> does not involve
6   computer readable medium claims. Therefore, the decision of <u>In re Nuijten</u> did not directly
7   address whether or not computer readable medium claims (i.e., so-called "Beauregard" claims)
8   are directed to statutory subject matter within the meaning of 35 U.S.C. § 101.
9
10 However, the Federal Circuit recently addressed Beauregard claims in <u>Cybersource v.</u>
11 <u>Retail Decision</u>, __ F.3rd __ (Fed. Cir. 2011) ([a] Beauregard claim … is a claim to a computer
12 readable medium … containing instructions for a computer to perform a particular process). In
13 determining the subject matter eligibility of a Beauregard claim, the Federal Circuit stated
14 "despite its Beauregard claim format, under *Abele*, we treat claim 2 as a process claim for patent-
15 eligibility purposes."
16
17 The Patent Office cannot ignore Federal Circuit precedent. <u>Koninklijke Philips</u>
18 <u>Electronics N.V. v. Cardiac Science Operating Co.</u>, 590 F.3d 1326, 1337, 93 USPQ2d 1227,
19 1235 (Fed. Cir. 2010) ("We remind … the Board that they must follow judicial precedent instead
20 of [PTO-formulated substantive rules] because the PTO lacks the substantive rulemaking
21 authority to administratively set aside judicial precedent."); <u>In re Lee</u>, 277 F.3d 1338, 1344, 61
22 USPQ2d 1430, 1434 (Fed. Cir. 2002) ("An agency is not free to refuse to follow [Federal
23 Circuit] precedent."). Therefore, the Examiner cannot rely upon <u>In re Nuijten</u> when determining
24 whether or not claim 34 is directed to statutory subject. Instead, the Examiner must treat

1   Beauregard claim 34 as a process for purposes of determining patent eligibility under 35 U.S.C.

2   § 101 based upon <u>Cybersource</u>.

3

4   Claim 29 recites the same process that is described in claim 34, and the Examiner has

5   already made the determination that the process of claim 29 is directed to statutory subject

6   matter. Thus, under <u>Cybersource</u>, claim 34 is also directed to statutory subject matter within the

7   meaning of 35 U.S.C. § 101.

8

9   <u>Proper claim construction required</u>

10   To the extent that the Examiner ignores <u>Cybersource v. Retail Decision</u>, claim 34 is still

11   directed to statutory subject matter within the meaning of 35 U.S.C. § 101. Claim 34, as

12   amended, recites a "machine readable storage." Thus, the issue at hand involves a proper claim

13   construction of the phrase "machine readable storage." "[C]laim construction ... is an important

14   first step in a § 101 analysis." <u>In re Bilski</u>, 545 F.3d 943 (Fed. Cir. 2008) (en banc). In making a

15   patentability determination, analysis must begin with the question, "what is the invention

16   claimed?" since "[c]laim interpretation, ... will normally control the remainder of the decisional

17   process. <u>Panduit Corp. v. Dennison Mfg. Co.</u>, 810 F.2d 1561, 1567-68 (Fed. Cir. 1987). The

18   general assumption is that different terms have different meanings. <u>Applied Medical Resources</u>

19   <u>Corp. v. United States Surgical Corp.</u>, 448 F.3d 1324, 1333 n.3 (Fed. Cir. 2006). Moreover,

20   ignoring a claim term constitutes clear legal error. <u>Uniroyal, Inc. v. Rudkin-Wiley Corp.</u>, 837

21   F.2d 1044, 5 USPQ2d 1434 (Fed. Cir. 1988); <u>In re Miller</u>, 441 F.2d 689, 169 USPQ 597 (CCPA

22   1971); <u>In re Wilson</u>, 424 F.2d 1382, 165 USPQ 494 (CCPA 1970). Thus, the Examiner cannot

23   ignore the term "storage" within the claimed "machine readable storage."

1

2   The issue of claim construction is discussed in M.P.E.P. § 2111, a portion of which is

3   reproduced below:

4   During patent examination, the pending claims must be "given their broadest reasonable
5   interpretation consistent with the specification." ... The broadest reasonable
6   interpretation of the claims must also be consistent with the interpretation that those
7   skilled in the art would reach. *In re Cortright*, 165 F.3d 1353, 1359, 49 USPQ2d 1464,
8   1468 (Fed. Cir. 1999).
9
10   Regarding the broadest reasonable construction standard, reference is also made to M.P.E.P. §

11   2111, which states:

12   During examination, the claims must be interpreted as broadly as their terms reasonably
13   allow. *In re American Academy of Science Tech Center*, 367 F.3d 1359, 1369, 70
14   USPQ2d 1827, 1834 (Fed. Cir. 2004) (The USPTO uses a different standard for
15   construing claims than that used by district courts; during examination the USPTO must
16   give claims their broadest reasonable interpretation in light of the specification. This
17   means that the words of the claim must be given their plain meaning unless the plain
18   meaning is inconsistent with the specification. *In re Zletz*, 893 F.2d 319, 321, 13 USPQ2d
19   1320, 1322 (Fed. Cir. 1989) (discussed below); *Chef America, Inc. v. Lamb-Weston, Inc.*,
20   358 F.3d 1371, 1372, 69 USPQ2d 1857 (Fed. Cir. 2004). (underlined added)
21
22   Regarding the "plain meaning" standard, reference is made to M.P.E.P. § 2111(III), entitled

23   "'Plain Meaning' refers to the ordinary and customary meaning given to the term by those of

24   ordinary skill in the art," which states:

25   "[T]he ordinary and customary meaning of a claim term is the meaning that the term
26   would have to a person of ordinary skill in the art in question at the time of the invention,
27   *i.e.*, as of the effective filing date of the patent application." *Phillips v. AWH Corp.*, 415
28   F.3d 1303, 1313, 75 USPQ2d 1321, 1326 (Fed. Cir. 2005) (*en banc*).
29
30   Referring to Philips v. AWH Corp., 415 F.3d, 1303 (Fed. Cir. 2005) (en banc), which was cited

31   immediately above, the Federal Circuit stated:

32   In *Texas Digital,* the court noted that "dictionaries, encyclopedias and treatises
33   are particularly useful resources to assist the court in determining the ordinary and
34   customary meanings of claim terms." ... Those texts, the court explained, are "objective
35   resources that serve as reliable sources of information on the established meanings that

1   would have been attributed to the terms of the claims by those of skill in the art," and

2   they "deserve no less fealty in the context of claim construction" than in any other area of

3   law ... The court added that because words often have multiple dictionary meanings, the

4   intrinsic record must be consulted to determine which of the different possible dictionary

5   meanings is most consistent with the use of the term in question by the inventor.

6   (citations omitted)

7

8   <u>Art-recognized meaning of storage medium</u>

9   As evidence of the plain meaning that one skilled in the art would attribute to the term

10   "storage medium," reference is made to the following dictionary[1] definitions:

11   **storage medium** [COMPUT SCI] Any device or recording medium into which

12   data can be copied and held until some later time, and from which the entire original data

13   can be obtained.[2]

14   **storage** [COMPUT SCI] Any device that can accept, retain and read back one or

15   more times, the means of storing data may be chemical, electrical magnetic, magnetic,

16   mechanical, or sonic.[3]

17

18   A proper claim construction of the claimed storage recognizes that storage does not

19   encompass a transitory signal propagating through a transmission medium. One skilled in the art

20   would instead recognize that although the term "computer usable medium"[4] encompasses both

21   storage and transmission medium, storage is distinct from a transmission medium. As evidence

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[1] The Federal Circuit has frequently relied upon <u>McGraw-Hill Dictionary of Scientific and Technical Terms</u> in construing claim language. <u>See, e.g., Becton, Dickinson and Company v. Tyco Healthcare Group, LP</u>, Case Nos. 2009-1053, 2009-1111 (Fed. Cir. July 29, 2010)(construing "articulated structure"); <u>L.B. Plastics, Inc. v. Amerimax Home Prods., Inc.</u>, 499 F.3rd 1303, 1308 (Fed. Cir. 2007)(construing "weld"); <u>Massachusetts Institute of Technology and Electronics for Imaging, Inc. v. Abacus Software</u>, 462 F.3rd 1344, 1351 (Fed. Cir. 2006)(construing "scanner"); <u>Intellectual Property Development, Inc. v. UA-Columbia Cablevision of Westchester, Inc.</u>, 336 F.3d 1308, 1314, (Fed. Cir. 2003)(construing "high frequency"); <u>CSS Fitness v. Brunswick Corp.</u>, 288 F.3d 1359, 1367 (Fed. Cir. 2002)(construing "reciprocating member"); <u>Mas-Hamilton Group v. LaGard, Inc.</u>, 156 F.3rd 1206 (Fed. Cir. 1998)(construing "stepper motor").
[2] <u>McGraw-Hill Dictionary of Scientific and Technical Terms</u>, 6th Edition, McGraw-Hill Book Company, 2003, pg. 2039.
[3] <u>McGraw-Hill Dictionary of Scientific and Technical Terms</u>, 6th Edition, McGraw-Hill Book Company, 2003, pg. 2038.
[4] The terms "computer usable medium" or "machine readable storage" are oftentimes used in place of "computer readable medium."

1 that one skilled in the art would differentiate between a transmission medium and storage (e.g., a

2 storage medium), reference is made to the following seven different patents.

3

4 U.S. Patent No. 7,346,899, filed on November 3, 2003, and assigned to Sun

5 Microsystems, Inc., states the following in column 21, lines 40-45:

6 Embodiment of the present invention may also provide the code itself, especially
7 when made available on any appropriate *computer-readable medium*. The expression
8 "*computer-readable medium*" includes a *storage medium* such as magnetic or optic, as
9 well as a *transmission medium* such as a digital or analog signal. (emphasis added)
10
11 Based upon these teachings, although a computer readable medium includes a storage medium

12 and a transmission medium, there is a recognized distinction between a storage medium and a

13 transmission medium.

14

15 U.S. Patent No. 7,298,192, filed on August 28, 2006, and assigned to Fujitsu Limited,

16 states the following in column 5, lines 45-51:

17 Here, note that this program can be stored in a *computer readable medium, and the*
18 *computer readable medium* includes a portable *storage medium* such as a CD-ROM, a
19 flexible disk, a DVD disk, a magneto-optical disk, an IC card or the like, or a database
20 that holds therein computer programs, or another computer and its database, or a
21 *transmission medium* on a communication line. (emphasis added)
22
23 These teachings also distinguish between a storage medium in which a program is stored and a

24 transmission medium.

25

26 U.S. Patent No. 7,644,313, filed on February 14, 2006, and assigned to International

27 Business Machines Corporation, states the following in column 13, lines 30-52:

28 In a preferred embodiment, the *computer readable medium* comprises both a
29 computer *storage medium* and a network medium. Preferably, the computer *storage*
30 *medium* includes semiconductor memory, magnetic disk, magnetic tape, compact disc

1   (CD), read-only memory (ROM), and/or digital video disc (DVD) and the network
2   medium comprises transmission devices on a network, such as, cables, routers, switches
3   and/or network adapter cards. Accordingly, the present invention can also be embodied in
4   the form of computer program code, for example, whether stored in a *storage medium,*
5   loaded into and/or executed by a computer, or transmitted over some *transmission*
6   *medium,* such as over electrical wiring or cabling, through fiber optics, or via
7   electromagnetic radiation, wherein, when the computer program code is loaded into and
8   executed by a computer, the computer becomes an apparatus for practicing the invention.
9   When implemented on a general purpose microprocessor, the computer program code
10   segments configure the microprocessor to create specific logic circuits. One skilled in the
11   art would appreciate that a set of programmable instructions executed by a processor of
12   the system are required for performing the process steps of the inventive system and
13   method described above.
14
15   Based upon these teachings, a computer readable medium includes a storage medium and a

16   network medium (i.e., a transmission medium). Whereas computer program code is stored in a

17   storage medium, the computer program code is transmitted over a transmission medium. Thus,

18   there is a recognized distinction between a storage medium and a transmission medium.

19

20   U.S. Patent No. 7,308,460, filed on December 17, 2004, and assigned to Microsoft

21   Corporation, states the following in column 13, line 57 through column 14, line 22:

22   As is apparent from the above, all or portions of the various systems, methods,
23   and aspects of the present invention may be embodied in hardware, software, or a
24   combination of both. When embodied in software, the methods and apparatus of the
25   present invention, or certain aspects or portions thereof, may be embodied in the form of
26   program code (i.e., instructions). This program code may be stored on a *computer-*
27   *readable medium,* such as a magnetic, electrical, or optical *storage medium,* including
28   without limitation a floppy diskette, CD-ROM, CD-RW, DVD-ROM, DVD-RAM,
29   magnetic tape, flash memory, hard disk drive, or any other machine-readable *storage*
30   *medium,* wherein, when the program code is loaded into and executed by a machine,
31   such as a computer or server, the machine becomes an apparatus for practicing the
32   invention. A computer on which the program code executes will generally include a
33   processor, a *storage medium* readable by the processor (including volatile and non-
34   volatile memory and/or storage elements), at least one input device, and at least one
35   output device. The program code may be implemented in a high level procedural or
36   object oriented programming language. Alternatively, the program code can be
37   implemented in an assembly or machine language. In any case, the language may be a
38   compiled or interpreted language.

   The present invention may also be embodied in the form of program code that is
transmitted over some ***transmission medium,*** such as over electrical wiring or cabling,
through fiber optics, over a network, including a local area network, a wide area network,
the Internet or an intranet, or via any other form of transmission, wherein, when the
program code is received and loaded into and executed by a machine, such as a computer,
the machine becomes an apparatus for practicing the invention. (emphasis added)

As discussed above, program code is stored on a storage medium but transmitted over a

transmission medium. Thus, a distinction has been made between a storage medium and a

transmission medium.

   U.S. Patent No. 7,299,489, filed May 25, 2000, and assigned to Lucent Technologies,

Inc., states the following in column 8, lines 4-23:

   As detailed above, the present invention can be embodied in the form of methods
and apparatuses for practicing those methods. The invention can also be embodied in the
form of program code embodied in tangible media, such as floppy diskettes, CD-ROMs,
hard drives, or any other machine-readable ***storage medium,*** wherein, when the program
code is loaded into and executed by a machine, such as a computer, the machine becomes
an apparatus for practicing the invention. The invention can also be embodied in the form
of program code, for example, in a ***storage medium,*** loaded into and/or executed by a
machine, or transmitted over some ***transmission medium,*** such as over electrical wiring
or cabling, through fiber optics, or via electromagnetic radiation, wherein, when the
program code is loaded into and executed by a machine, such as a computer, the machine
becomes an apparatus for practicing the invention. When implemented on a general-
purpose processor, the program code segments combine with the processor to provide a
unique device that operates analogously to specific logic circuits. (emphasis added)

These teachings also make a distinction between a storage medium, in which program code is

embodied, and a transmission medium, over which the program code can be transmitted.

   U.S. Patent No. 7,298,967, filed on April 21, 2005, and assigned to Delphi Technologies,

Inc., states the following in column 7, line 63 through column 8, line 18:

   The disclosed invention can be embodied in the form of computer, controller, or
processor implemented processes and apparatuses for practicing those processes. The

present invention can also be embodied in the form of computer program code containing instructions embodied in tangible media 56 such as floppy diskettes, CD-ROMs, hard drives, memory chips, or any other computer-readable *storage medium,* wherein, when the computer program code is loaded into and executed by a computer, controller, or processor 32, the computer, controller, or processor 32 becomes an apparatus for practicing the invention. The present invention may also be embodied in the form of computer program code as a data signal 57 for example, whether stored in a *storage medium* 56, loaded into and/or executed by a computer, controller, or processor 32 or transmitted over some *transmission medium,* such as over electrical wiring or cabling, through fiber optics, or via electromagnetic radiation, wherein, when the computer program code is loaded into and executed by a computer 32, the computer 32 becomes an apparatus for practicing the invention. When implemented on a general-purpose processor the computer program code segments configure the processor to create specific logic circuits. (emphasis added)

The above-reproduced passage clearly distinguishes a computer readable storage medium, in which a computer program code is stored and a transmission medium, over which computer program code can be transmitted.

U.S. Patent No. 7,702,766, filed on June 14, 2004, and assigned to Oracle America, Inc., states the following in column 17, lines 3-8:

This invention also encompasses embodiments in software code, especially when made available on any appropriate *computer-readable medium*. The expression "*computer-readable medium*" includes a *storage medium* such as magnetic or optic, as well as a *transmission medium* such as a digital or analog signal. (emphasis added)

Based upon these teachings, although a computer readable medium includes storage medium and transmission medium, there is a recognized distinction between a storage medium and a transmission medium.

Case law – storage medium is statutory under 35 U.S.C. § 101

Not only does one skilled in the art recognize that there is a distinction between storage a transmission medium, as evidenced by the above-reproduced passages, the case law also

1   supports a conclusion that a claim including the claim limitations at issue (i.e., storage) is

2   directed to statutory subject matter within the meaning of 35 U.S.C. § 101. In the decision of <u>In</u>

3   <u>re Beauregard</u>, 53 F.3d 1583 (Fed. Cir. 1995), the Federal Circuit issued a precedential order

4   dismissing an appeal of a rejection of computer product claims[5] based upon 35 U.S.C. § 101

5   because the Patent Office conceded "that computer programs embodied in a tangible medium,

6   such as floppy diskettes, are patentable subject matter under 35 U.S.C. Sec. 101 and must be

7   examined under 35 U.S.C. Secs. 102 and 103." As would be recognized by those skilled in the

8   art, floppy diskettes are examples of machine readable storage.

9

10   The notion that storage is directed statutory subject matter within the meaning of 35

11   U.S.C. § 101 is also supported by a Decision of the Board of Patent Appeals and Interferences

12   (hereinafter the Board). Specifically, reference is made to the non-precedential opinion of <u>Ex</u>

13   <u>parte Mehta</u> (Appeal No. 2008-004853). In reversing a rejection under 35 U.S.C. § 101, the

14   Board held the following:

15   We agree with Appellants (App. Br. 10-11; Reply Br. 1-3), however, that,
16   contrary to the Examiner's contention, claims 29-42 necessarily <u>include a storage</u>
17   <u>medium</u> since the language of independent claim 29 recites an "article comprising a
18   storage medium…." Further, the language of independent claim 29, which recites that the
19   storage medium stores computer-executable instructions which are readable and cause a
20   computer to perform the listed operations, establishes the requisite structural and
21   functional interrelationships between the computer and the stored instructions which
22   permit the computer's functionality to be realized. *See In re Lowry*, 32 F.3d 1579, 1583-
23   84 (Fed. Cir. 1994). (emphasis added)
24

25   Therefore, the Board recognized that the presence of "storage medium" (i.e., an example of

26   storage) within the claims rendered the claims statutory under 35 U.S.C. § 101.

---

[5] The application at issued ultimately issued as U.S. Patent No. 5,710,578, and claim 1 recites "a computer usable medium having computer readable program code means embodied therein" for causing a computer to perform various steps of a method.

1

2   Similarly, within <u>Ex parte Goldberg</u> (Appeal No. 2009-011732), the Board reversed a

3   rejection under 35 U.S.C. § 101 to a claim reciting "[a] computer program product, comprising:

4   a computer <u>storage</u> medium and an executable computer program code mechanism embedded in

5   the computer storage medium" (emphasis added). Additionally, referring to <u>Ex parte Dureau</u>

6   (Appeal No. 2009-007211), in reversing a rejection under 35 U.S.C. § 101, the Board held the

7   following:

8   Turning first to the non-statutory subject matter rejection, the Examiner contends
9   (Final Rej. 6) that the claimed subject matter is directed to a signal which is neither a
10   process, machine, manufacture, nor composition of matter. Appellant argues (App. Br.
11   12) that the amended claim recites a "computer readable <u>storage</u> medium," and that "a
12   signal is not a storage medium." We agree with Appellant that the amended claim is
13   statutory because it is now directed to a tangible computer readable *storage* medium, and
14   not to an intangible signal. Thus, the non-statutory subject matter rejection of claims 26
15   to 32 is reversed. (emphasis in original)
16

17   <u>The M.P.E.P. supports the conclusion that storage is statutory</u>

18   Reference is also made to the following discussion found in M.P.E.P. § 2106.01, which

19   states:

20   When functional descriptive material is recorded on some <u>computer-readable medium</u>, it
21   becomes structurally and functionally interrelated to the medium and will be statutory in
22   most cases since use of technology permits the function of the descriptive material to be
23   realized. (emphasis added)
24

25   In this particular instance, independent claim 34 recites a "machine readable storage

26   having stored therein computer program code." Claim 34 also recites that the computer program

27   code is used by a machine (i.e., a computer hardware system) to perform various steps of a

28   method. Thus, the use of technology (i.e., storage and a computer hardware system) permits the

29   function of the functional descriptive material (i.e., computer program code) to be realized.

1   Therefore, claim 34 clearly falls within the scope of statutory subject matter described within

2   M.P.E.P. § 2106.01 and at issue within In re Beauregard, Ex parte Mehta, Ex parte Goldberg,

3   and Ex parte Dureau.

4

5   The Federal Circuit case of *In re Nuitjen* supports the conclusion that storage medium are

6   statutory under 35 U.S.C. § 101

7   Although oftentimes cited by the Patent Office for the proposition that signals, *per se*, are

8   not statutory subject matter within the meaning of 35 U.S.C. § 101, the positions taken by the

9   Patent Office while litigating the Federal Circuit decision of In re Nuijten, 500 F.3d 1346 (Fed.

10   Cir. 2007), reh'g en banc denied, 515 F.3d 1361 (Fed. Cir. 2008), cert. denied, 127 S. Ct. 70

11   (2008), is not consistent with a finding that storage (e.g., a storage medium) is not directed to

12   statutory subject matter. A review of the procedural history and the arguments presented by the

13   Patent Office is enlightening while considering the holding of the Federal Circuit in the context

14   in which it was rendered,. The history of the application at the Board was characterized by the

15   Federal Circuit as follows:

16   As to Claim 15, it found that "[t]he storage medium in claim 15 nominally puts the claim
17   into the statutory category of a 'manufacture'" and thus reversed the Examiner's § 101
18   rejection of that claim. Id. at 1351.
19
20   Notably, the Board reversed a rejection under 35 U.S.C. § 101 of a *storage medium* claim.

21

22   Referring to the affirmance of claim 14, which was directed to "[a] signal with embedded

23   supplemental data," the Federal Circuit characterized the reasoning behind the Board's

24   affirmance of the rejection under 35 U.S.C. § 101 as follows:

25   However, it affirmed the Examiner's § 101 rejections of Claims 14 and 22-24 on two
26   grounds. First, it noted that "[t]he signal . . . has no physical attributes and merely

describes the abstract characteristics of the signal and, thus, it is considered an 'abstract idea'" unpatentable under <u>Diamond v. Diehr</u>, 450 U.S. 175, 185 (1981). Second, the Board determined that the claims at issue fell into none of the four statutory categories of patentable subject matter: "process, machine, manufacture, or composition of matter." 35 U.S.C. § 101. In the Board's view, the claims were not directed to a process because they did not "recite acts"; not a machine because "the signal . . . has no concrete tangible physical structure"; and "not composed of matter and [therefore] clearly not a 'composition of matter.'" Finally, the Board noted that "[t]he signal does not have any physical structure or substance and does not fit the definition of a 'manufacture' which requires a tangible object." <u>Id.</u> at 1351-52.

Thus, one of the grounds upon which the Board affirmed the rejection was that "the claims at issue fell into none of the four statutory categories of patentable subject matter."

During oral argument, the Patent Office relied upon two cases, <u>In re Lowry</u> and <u>In re Beauregard</u>, <u>Id.</u> at 1366 (Linn, concurring-in-part and dissenting-in-part), both of which support a conclusion that a computer usable storage is directed to statutory subject matter.

As stated by the Federal Circuit within <u>In re Nuijten</u>,

The claims on appeal cover transitory electrical and electromagnetic signals propagating through some medium, such as wires, air, or a vacuum. Those types of signals are not encompassed by any of the four enumerated statutory categories: "process, machine, manufacture, or composition of matter." <u>Id.</u> at 1352.

After construing the language of the claims, the Federal Circuit characterized the issue as follows:

Our inquiry here, like that of the Board, will consider whether a transitory, propagating signal is within any of the four statutory categories: process, machine, manufacture, or composition of matter ... The essence of the dispute between the parties is whether a transitory signal is covered by <u>any</u> statutory category. The four categories together describe the exclusive reach of patentable subject matter. If a claim covers material not found in any of the four statutory categories, that claim falls outside the plainly expressed scope of § 101 even if the subject matter is otherwise new and useful. We must therefore determine whether any of the four categories encompass the claims on

1 appeal, and it is appropriate to consider each of the categories in turn. Id. at 1353-54.
2 (emphasis in original)
3

4   The Federal Circuit then proceeded to go through each of the four identified categories of

5 statutory subject matter (i.e., process, machine, manufacture, composition of matter, or

6 improvement thereof), and for these four identified categories of statutory subject matter, the

7 Federal Circuit respectively concluded that "the claims are not directed to a process," "[a]

8 propagating signal is not a 'machine,'" "Nuijten's signals, standing alone, are not

9 'manufacture[s]," and "Nuijten's signals are not 'composition[s] of matter.'" The majority opinion

10 concluded as follows:

11   A transitory, propagating signal like Nuijten's is not a "process, machine,
12   manufacture, or composition of matter." Those four categories define the explicit scope
13   and reach of subject matter patentable under 35 U.S.C. § 101; thus, such a signal cannot
14   be patentable subject matter. Id. at 1357.
15

16   Notably, the Federal Circuit's rationale (i.e., "not a 'process, machine, manufacture, or

17 composition of matter'") for upholding the Board's decision is the same rationale that the Board

18 relied upon to affirm the rejection of the Examiner ("the claims at issue fell into none of the four

19 statutory categories of patentable subject matter: 'process, machine, manufacture, or composition

20 of matter'"). Thus, the decision of In re Nuijten did not change the law, as that law was

21 interpreted by the Patent Office (i.e., the Board), when affirming the rejection of claim 14.

22

23   A rejection, based upon the decision of In re Nuijten, of a claim directed to a storage

24 medium is inconsistent with the positions taken by the Patent Office within In re Nuijten. As

25 noted above, the Board reversed a rejection of a storage medium based upon 35 U.S.C. § 101.

26 Moreover, the Patent Office relied upon both In re Lowry and In re Beauregard in its arguments

1   to the Federal Circuit, and both of these decisions support the notion that a claim directed to a

2   "storage medium" is directed to statutory matter within the meaning of 35 U.S.C. § 101.

3

4   The analysis employed by the Federal Circuit (i.e., "[w]e must therefore determine

5   whether any of the four categories encompass the claims on appeal') cannot be applied to the

6   claims at issue to arrive at the same conclusion reached by the Federal Circuit. Specifically, as

7   recognized by the Federal Circuit, the recitation of a storage medium puts the claim into the

8   statutory category of 'manufacture.' Therefore, had the Federal Circuit applied the same analysis

9   to the present claims, the Federal Circuit could not have arrived at the same conclusion.

10

11   Moreover, the Federal Circuit within <u>In re Nuijten</u> made the following finding as to the

12   nature of a signal:

13   In essence, energy embodying the claimed signal is fleeting and is <u>devoid of any</u>
14   <u>semblance of permanence</u> during transmission. [FN 6] (emphasis added)
15
16   Footnote 6 of <u>In re Nuijten</u>, which was referenced in the immediately above-reproduced passage,

17   is reproduced below:

18   [FN 6]   Of course, such a signal could be stored for later use, but the result of
19   such storage would be a "storage medium" containing the signal. Such a storage medium
20   would likely be covered by allowed Claim 15 of Nuijten's application, which is not
21   before us on appeal. <u>Id.</u> at 1356.
22
23   Notably, the Federal Circuit recognizes that there is a difference between a transitory,

24   propagating signal and storage (e.g., a storage medium).

25

26   Reference is made to the above-reproduced dictionary definition of "storage medium,"

27   which is "[a]ny device or recording medium into which data can be copied and <u>held until some</u>

1 later time" (emphasis added). In contrasting the Federal Circuit's finding that a propagating

2 signal is "devoid of any semblance of permanence" with the above-reproduced definition of

3 "storage medium," which is a medium into which "data can be ... held until some later time," a

4 distinct difference between a transitory, propagating signal and storage is revealed. Whereas a

5 signal is transitory and devoid of permanence, storage has some semblance of permanence such

6 that the data can be held (i.e., stored) until some later time. Additionally, holding (i.e., storing)

7 data is not the same as transmitting data. Therefore, a proper claim construction of the term

8 "storage" does not encompass a transitory, propagating signal. Ex parte Hooks, Appeal No.

9 2009-002130 ("we agree with Appellant that the claimed 'computer readable medium *storing*

10 instructions' is directed to a statutory article of manufacture, because something that *stores*

11 instructions cannot be intangible) (emphasis in original).

12

13   Based upon the above arguments, a proper claim construction of the term "storage" does

14 not encompass a transitory, propagating signal, *per se*. Instead, the claimed "storage" constitutes

15 statutory subject matter within the meaning of 35 U.S.C. § 101. Specifically, the "storage"

16 constitutes either a manufacture or an improvement to a machine (i.e., a computer). Thus, the

17 rejection of claim 34 under 35 U.S.C. § 101 is not proper and should be withdrawn.

18

19 _____

20 <div align="center">PRINCIPLES OF LAW</div>

21

22 <div align="center">*Examiner's Burden*</div>

1   The Examiner has the initial burden to set forth the basis for any rejection so as to put

2 Appellants on notice of the reasons why Appellants are not entitled to a patent on the claim

3 scope that Appellants seek – the so-called "*prima facie* case." In re Oetiker, 977 F.2d 1443,

4 1445 (Fed. Cir. 1992); In re Piasecki, 745 F.2d 1468, 1472 (Fed. Cir. 1984). Additionally, the

5 "[t]he examiner's action will be complete as to all matters," 37 C.F.R. § 1.104(b), and "[t]he

6 pertinence of each reference, if not apparent, must be clearly explained." 37 C.F.R. § 1.104(c).

7 Reference is also made to 37 C.F.R. § 1.2, which states "[t]he action of the Patent and Trademark

8 Office will be based exclusively on the written record in the Office."

9

10   Within In re Jung, __ F.3rd __ (Fed. Cir. 2001), the Federal Circuit discussed the *prima*

11 *facie* case and its relation to 35 U.S.C. § 132 as follows:

12   In other words, the PTO carries its procedural burden of establishing a prima facie case
13   when its rejection satisfies 35 U.S.C. § 132, in "notify[ing] the applicant ... [by] stating
14   the reasons for [its] rejection, or objection or requirement, together with such information
15   and references as may be useful in judging of the propriety of continuing the prosecution
16   of [the] application." 35 U.S.C. § 132. That section "is violated when a rejection is so
17   uninformative that it prevents the applicant from recognizing and seeking to counter the
18   grounds for rejection." Chester v. Miller, 906 F.2d 1574, 1578 (Fed. Cir. 1990).
19
20 The issue within In re Jung revolved around whether or not the Examiner properly identify the

21 claimed "first well-charge-well controller." On page 3 of Final Office Action, the Examiner

22 addressed this reference using the following analysis: "a first well-charge-well controller (340)

23 operably coupled with the first charge pump (see Col. 6, lines 56-67)" after previously indicating

24 the first charge pump was associated with reference number 320. The Federal Circuit concluded

25 that "the identification of where each limitation of the rejected claims is shown in the prior art

26 reference by specific column and line number" met the burden of establishing a *prima facie* case.

1   The Federal Circuit also noted that "Jung did not respond by asserting that there was no on-the-

2   record claim construction, or that he did not understand the examiner's rejection."

3

4   Referring generally to the "Examination Guidelines for Determining Obviousness Under

5   35 U.S.C. 103 in View of the Supreme Court Decision in KSR International Co. v. Teleflex

6   Inc.," 72 Fed. Reg. 57,526 (2007) (hereinafter the Examination Guidelines for Determining

7   Obviousness), and specifically to the paragraph entitled "Office Personnel as Factfinders" on

8   page 57,527 of the Examination Guidelines for Determining Obviousness, the following was

9   stated:

10   Office personnel fulfill the critical role of factfinder when resolving the *Graham*
11   inquiries. It must be remembered that while the ultimate determination of obviousness is
12   a legal conclusion, the underlying *Graham* inquiries are factual. When making an
13   obviousness rejection, Office personnel must therefore ensure that the written record
14   includes findings of fact concerning the state of the art and the teachings of the references
15   applied. In certain circumstances, it may also be important to include explicit findings as
16   to how a person of ordinary skill would have understood prior art teachings, or what a
17   person of ordinary skill would have known or could have done. Factual findings made by
18   Office personnel are the necessary underpinnings to establish obviousness.
19

20   *Appellants' Burden*

21   If the Examiner does not produce a *prima face* case of unpatentability, then the rejection

22   cannot be maintained, and Appellants are not obligated to respond. See In re Oetiker, supra ("If

23   examination at the initial stage does not produce a *prima facie* case of unpatentability, then

24   without more the applicant is entitled to grant of the patent"). Only after a *prima face* case of

25   unpatentability does the burden shift to Appellants to rebut the *prima facie* case. See In re Kahn,

26   441 F.3d 977, 985-86 (Fed. Cir. 2006) ("[o]n appeal to the Board, an applicant can overcome a

27   rejection by showing insufficient evidence of *prima facie* obviousness or by rebutting the *prima*

1   *facie* case with evidence of secondary indicia of nonobviousness") (quoting In re Rouffet, 149

2   F.3d 1350, 1355 (Fed. Cir. 1998)).

3

4   *Standard of Review*

5   Decisions of the Patent Office are reviewed in accordance with the standards of the

6   Administrative Procedure Act. See Dickinson v. Zurko, 527 U.S. 150, 165 (1999) (applying the

7   Administrative Procedure Act, 5 U.S.C. § 706, to appeals of PTO rulings). Thus, the Patent

8   Office's factual findings are reviewed to determine whether they are unsupported by substantial

9   evidence. See In re Gartside, 203 F.3d 1305, 1312 (Fed. Cir. 2000). Substantial evidence means

10   "more than a mere scintilla. It means such relevant evidence as a reasonable mind might accept

11   as adequate to support a conclusion." Richardson v. Perales, 402 U.S. 389, 401 (1971). "[T]he

12   Board cannot simply reach conclusions based on its own understanding or experience - or on its

13   assessment of what would be basic knowledge or common sense. Rather, the Board must point

14   to some concrete evidence in the record in support of these findings." In re Zurko, 258 F.3d

15   1379, 1385, 59 USPQ2d 1693, 1697 (Fed. Cir. 2001). The failure of the Board to provide an

16   administrative record showing the evidence by which findings of fact are based constitutes

17   reversible error. In re Lee 277 F.3d 1338 (Fed. Cir. 2002). The underlying findings of facts

18   supporting the legal conclusion obviousness are also reviewed for substantial evidence. In re

19   Gartside, 203 F.3d at 1316.

20

21   In the Decision of Ex parte Frye, (Appeal No. 2009-006013) (Precedential), while

22   referring to a rejection under 35 U.S.C. § 103, the Honorable Board stated:

23   The panel then reviews the obviousness rejection for error based upon the issues
24   identified by appellant, and in light of the arguments and evidence produced thereon. *See*

Oetiker, 977 F.2d at 1445 ("In reviewing the examiner's decision on appeal, the Board must necessarily weigh all of the evidence and argument.") (emphasis added); *see also* 37 C.F.R. § 41.37(c)(1)(vii) (appeal brief must include "the contentions of appellant with respect to each ground of rejection presented for review in paragraph (c)(1)(vi) of this section, and the basis therefor, with citations of the statutes, regulations, authorities, and parts of the record relied on"). Specifically, the Board reviews the particular finding(s) contested by an appellant anew in light of all the evidence and argument on that issue.

Therefore, a complete *de novo* review is to be performed on all issues that are raised by Appellants without deference to the positions taken by the Examiner.

With regard to the burden placed on the Honorable Board in analyzing the rejections, the Federal Circuit held the following in Gechter v. Davidson, 1167 F.3d 1454, 1460 (Fed. Cir. 1997):

> In sum, we hold that the Board is required to set forth in its opinions specific findings of fact and conclusions of law adequate to form a basis for our review. In particular, we expect that the Board's anticipation analysis be conducted on a limitation by limitation basis, with specific fact findings for each contested limitation and satisfactory explanations for such findings. [FN3] Claim construction must also be explicit, at least as to any construction disputed by parties to the interference (or an applicant or patentee in an ex parte proceeding).
> [FN3] While not directly presented here, obviousness determinations, when appropriate, similarly must rest on fact findings, adequately explained, for each of the relevant obviousness factors in the Supreme Court's decision in Graham.

Obviousness

In Graham v. John Deere Co., 383 U.S. 1, 148 USPQ 459 (1966), the Supreme Court set forth the factual inquiries that are to be applied when establishing a background for determining obviousness under 35 U.S.C. 103. These factual inquiries are summarized as follows:

(A) "the scope and content of the prior art are to be determined";
(B) "the differences between the prior art and the claims at issue are to be ascertained";
(C) "the level of ordinary skill in the pertinent art [is to be] resolved"; and
(D) "indicia of nonobviousness" are to be evaluated.

1   However, in order to make a proper comparison between the claimed invention and the prior art,

2   the language of the claims must first be properly construed. See, e.g., Gechter v. Davidson, 116

3   F.3d at 1460 (requiring explicit claim construction as to any terms in dispute); In re Paulsen, 30

4   F.3d 1475, 1479 (Fed. Cir. 1994); Panduit Corp. v. Dennison Mfg. Co., 810 F.2d 1561, 1567-68

5   (Fed. Cir. 1987) (In making a patentability determination, analysis must begin with the question,

6   "what is the invention claimed?" since "[c]laim interpretation, ... will normally control the

7   remainder of the decisional process").

8

9   As stated by the Supreme Court: "rejections on obviousness grounds cannot be sustained

10 by merely conclusory statements; instead there must be some articulated reasoning with some

11 rational underpinning to support the legal conclusion of obviousness." KSR Int'l Co. v. Teleflex

12 Inc., 127 S. Ct. 1727, 1741 (2007) (quoting In re Kahn, 441 F.3d 977, 988 (Fed. Cir. 2006)). As

13 also stated by the Supreme Court in KSR, "a patent composed of several elements is not proved

14 obvious merely by demonstrating that each of its elements was, independently, known in the

15 prior art."

16

17 **THE REJECTION OF CLAIMS 24-27, 29-32, AND 34-37 UNDER 35 U.S.C. § 103 FOR**

18 **OBVIOUSNESS BASED UPON NAGASAWA IN VIEW OF BETGE-BREZETZ**

19   For convenience of the Honorable Board in addressing the rejections, claims 25, 29-30,

20 and 34-35 stand or fall together with independent claim 24; claim 27 stands or falls together with

21 dependent claim 26; claim 36 stands or falls together with dependent claim 31; and claim 37

22 stands or falls together with dependent claim 32.

23

1   Claim 24

2   After the Decision on Appeal, Appellants presented a Second Amendment dated

3   September 22, 2010, and stated the following on pages 6 and 7 of the Second Amendment.

4   Appellants previously argued that the applied prior art fails to identically disclose the claimed

5   "estimated SLA breach value." As previously claimed, the estimated SLA breach value was

6   associated with a communicative coupling. The Honorable Board's analysis regarding this

7   particular limitation is found in the second full paragraph on page 9 of the Decision on Appeal.

8   Specifically, the Honorable Board wrote:

9   The claim limitation further requires that one end of this communicative coupling
10   be "to a user interface." The rest of the claim limitation, "through which an SLA breach
11   values estimate is proposed," recites the use intended for the claimed structure. However,
12   nothing in claim 1 affirmatively sets forth any structure that accepts the breach value
13   estimate (or data). Nor does claim 1 affirmatively recite any structure that links this data
14   to any component that is capable of performing the subsequently recited "at least one
15   SLA breach value estimation process." As such, the limitation "a further communicative
16   coupling to a user interface through which an SLA breach value estimate is proposed"
17   merely reads, for example, on a cable for various data input components that are capable
18   of proposing SLA breach value estimates. That is, the contested limitation reads on, inter
19   alia, a cable for a computer keyboard or mouse. (emphasis added)
20

21   Notably, the Honorable Board did not give the term "estimated SLA breach value" any

22   patentable weight. In so doing, the Honorable Board found that the previously claimed "a further

23   communicative coupling to a user interface through which an SLA breach value estimate is

24   proposed" is identically disclosed by "a cable for a computer keyboard or mouse." In view of

25   these findings, Appellants presented new independent claims that positively recite the claimed

26   "estimated SLA breach value." Importantly, Appellants note that the Honorable Board neither

27   made nor endorsed findings that the applied prior art identically discloses the claimed "estimated

28   SLA breach value." On this basis, Appellants maintain that the applied prior art fails to teach the

29   limitations now presented.

1

2   After the issuance of the Third Office Action dated November 10, 2010 (hereinafter the

3   Third Office Action), Appellants presented the following arguments in a Supplemental

4   Amendment dated March 31, 2011 (hereinafter the Third Amendment):

5   On page 10 of the Third Office Action, the Examiner asserted "Applicant's
6   arguments with respect to the claims have been considered but are moot in view of the
7   new ground(s) of rejection." In this regard, the Examiner is referred to M.P.E.P. §
8   707.07(f), entitled "Answer All Material Traversed," which clearly states that upon
9   Applicants traversing the Examiner's rejection, "the examiner should, if he or she repeats
10   the rejection, take note of the applicant's argument and answer the substance of it."
11   Moreover, M.P.E.P. § 707.07(f) also states that even if the arguments are moot in view of
12   the new ground(s) of rejection, the "examiner <u>must</u>, however, address any arguments
13   presented by the applicant which are still relevant to any references being applied"
14   (emphasis added).
15   In this instance, Appellants argued that Betge-Brezetz fails to teach the
16   limitations at issue. Although the Examiner presented a new primary reference of
17   Nagasawa, the Examiner still relies upon Betge-Brezetz to teach the limitations at issue
18   (i.e., "estimated SLA breach value"). Therefore, the Examiner is required to answer the
19   substance of Applicants' arguments, and thus, the Examiner has <u>failed</u> to follow the
20   specific directions of the M.P.E.P. in this matter. (emphasis in original)

21

22   The Examiner, however, has again failed to address Appellants' arguments. The

23   following chart is a comparison of the Examiner's analysis on page 3 of the Third Office Action

24   with the Examiner's analysis on page 3 of the Fourth Office Action:

Third Office Action	Fourth Office Action
Nagasawa does not explicitly teach generate the estimated SLA breach value by processing the historical performance data for the resource.	Nagasawa does not explicitly teach generate the estimated SLA breach value by processing the historical performance data for the resource.
Betge teaches generate the estimated SLA breach value by processing the historical performance data for the resource. (See paragraphs [0046] — [0050], Betge)	**Betge teaches generate the estimated SLA breach value by processing the historical performance data for the resource. (See paragraphs [0046] — [0050], Betge)**

25

26

1   Notably, at no point in either the Third or Fourth Office Actions has the Examiner

2   attempted to address the issues raised by Appellants in the Second Amendment (i.e., Betge-

3   Brezetz fails to the claimed "estimated SLA breach value"). Therefore, despite _twice_ raising this

4   issue, the Examiner has failed to address Appellants' arguments.

5

6   _____

7   To reiterate the arguments already presented by Appellants during prosecution, the

8   present issue involves one of a claim construction of the phrase "estimated SLA breach value."

9   Claims will be given their broadest reasonable interpretation consistent with the specification, and

10   limitations appearing in the specification will not be read into the claims. In re Etter, 756 F2d 852,

11   858, 225 USPQ 1, 5 (Fed. Cir. 1985). In analyzing the scope of the claim, office personal must

12   rely on the appellant's disclosure to properly determine the meaning of the terms used in the claims.

13   Markman v. Westview Instruments, 52 F3d 967, 980, 34 USPQ2d 132, 1330 (Fed. Cir. 1995).

14   "[I]nterpreting what is _meant_ by a word in a claim 'is not to be confused with adding an extraneous

15   limitation appearing in the specification, which is improper'" (emphasis in original). In re

16   Cruciferous Sprout Litigation, 301 F.3d 1343, 1348, 64 USPQ2d 1202, 1205 (Fed. Cir. 2002)

17   (citing Intervet America Inc. v. Kee-Vet Laboratories Inc., 12 USPQ2d 1474, 1476 (Fed. Cir.

18   1989)). As stated by the Federal Circuit within Phillips v. AWH Corp., 415 F.3d 1303, 1322

19   (Fed. Cir. 2005) (en banc), the specification "is always highly relevant to the claim construction

20   analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term."

21   See also Retractable Technologies v. Becton, Dickinson and Company, ___ F.3rd ___ (Fed. Cir.

22   2011) ("Claim language must always be read in view of the written description").

23

1 Notably, however, throughout the entire prosecution of the present application, the

2 Examiner has failed to present an <u>explicit</u> claim construction for the phrase "estimated SLA

3 breach value." Referring to page 3 of Appellants' disclosure, an SLA breach value is the value

4 against which trends and violations are calculated to determine whether or not the SLA has been

5 breached. However, the SLA breach value, as recited in claim 1, is not the current SLA breach

6 value.[6] Instead, the SLA breach value is an *estimate* that is being proposed.

7

8 Referring to paragraph [0003] of Betge-Brezetz, "the expression 'predicting evolution' (or

9 planning) refers to determining when and where it is necessary to integrate new plant (for

10 example a router or a new card) or to increase the traffic capacity of a link." Also, referring to

11 paragraph [0011], Betge-Brezetz teaches that "in the present context 'planning proposal' means a

12 proposal for modification (or evolution) of the network, specifying in particular action to be

13 taken on network plant and dates for the work to be carried out." Thus, the Examiner's alleged

14 teaching of "network evolution planning proposal" does not identically disclose the claimed

15 "SLA breach value estimate."

16

17 Certain of the above-reproduced arguments (incorporated herein) were previously

18 presented on page 10, line 12 through page 11, line 20 of the First Amendment. The Examiner's

19 response to these arguments is found in the paragraph spanning pages 7 and 8 of the Second

20 Office Action in which the Examiner asserted the following:

21   Examiner is not persuaded by Applicants arguments. Examiner points to
22   paragraphs [0047] - [0050] of Betge-Brezetz and specifically to the section which
23   describes the thresholds of the Service Level Agreement which are values against which
24   violations of the SLA are identified.

---

[6] Original claim 3, now cancelled, refers to a separate "current SLA breach value setting."

The Examiner's response completely ignores Appellants' arguments. As discussed above, the claimed "estimated SLA breach value" is an *estimate* that is being proposed. This concept, however, is entirely absent from the teachings of Betge-Brezetz.

In the paragraph spanning pages 8 and 9 of the prior Examiner's Answer dated March 20, 2009, the Examiner presented the following responsive arguments:

> In **response to B)**, in Applicant's specification, page 8 lines 10-12, "the SLA breach value estimate can be produced by extrapolating existing data to predict future data". Betge-Brezetz discloses this limitation in its entirety in paragraphs [0046] — [0052] and [0078]. Specifically, paragraphs [0048] discloses future types of service level agreements likely to be entered into by the network operator and a current or a future customer with an prediction of what the service level terms will be. Further in paragraphs [0049], Betge-Brezetz discloses an aggregation module which takes service level agreement usage profiles and future requirements in order to provide a prediction, an estimate, of the agreement parameters one of which is a value/threshold in which the service level agreement will be breached. Betge-Brezetz thus discloses a future prediction of all parameters in a SLA including an estimate of a breach value, a SLA breach value estimate. (emphasis in original)

The Examiner's first explicit finding of fact is allegedly derived from paragraph [0048] of Betge-Brezetz, which is reproduced below:

> For example, the third data consists of the future types of service level agreements likely to be entered into by the network operator and its current and/or future customers, and the predicted evolution of service subscriptions. It is derived by the operator from the results of market research and transmitted to the aggregation module 8, for example via a transmission module 9 of the graphical user interface 5. (Emphasis added)

To be clear, the entire claim limitation at issue is "generate the estimated SLA breach value by processing the historical performance data for the resource." Although the Examiner's cited passage refers to "future types of service level agreements," the Examiner's cited passage fails to go into detail as to the specifics of the service level agreements, which would include a SLA

1   breach value. Moreover, as claimed, the estimated SLA breach value is based upon processing

2   the historical performance data for the resource. On the contrary, the service level agreement

3   described by Betge-Brezetz is "derived … from the results of market research." Market research,

4   as taught by Betge-Brezetz, is not the same as historical performance data for the resource, as

5   claimed.

6

7   The Examiner's second explicit finding of fact is allegedly derived from paragraph [0049]

8   of Betge-Brezetz, which is reproduced below:

9   The predictive state delivered by the aggregation module 8 is preferably a service
10   level agreement usage predictive profile obtained by aggregating all service level
11   agreement usage profiles, extrapolated from the first data received from the network, and
12   then taking into account third data representative of future requirements. In fact, as
13   previously indicated, the service level agreements consist of one or more service level
14   specifications that define all technical parameters of the service (and the thresholds to be
15   guaranteed). Each of these parameters is generally a real number whose value is
16   estimated as a function of time, so that the record of a parameter generally takes the form
17   of a curve. This applies in particular to the bandwidth, as shown in FIGS. 3 and 4.
18   Consequently, aggregation is based on adding different curves associated with each
19   parameter, for example a curve of the measurements (or extrapolation) and a curve
20   obtained from the market research results. Weighting coefficients can be introduced, for
21   example to give greater weight to some predictions, considered to be more reliable, or to
22   some services, or to predictions rather than to market research curves.
23

24   Referring to the first underlined portion of the above-reproduced passage, a service level

25   agreement usage predictive profile is generated based upon an aggregation of all service level

26   agreement usage profiles. This teachings fails to teach the limitations at issue for at least two

27   reasons: First, a "service level agreement usage predictive profile" is not a "SLA breach value."

28   The predictive profile of Betge-Brezetz is indicative of a predicted use. However, a profile that

29   predicts usage does not establish a SLA breach value (i.e., the value that determines whether or

30   not the SLA is breached). Second, the SLA breach value is based upon "historical performance

1   data for the resource." The predictive profile of Betge-Brezetz, however, is not based upon

2   historical performance data for a <u>resource</u>. Instead, it is based upon usage profiles, which are

3   profiles for each SLA, as discussed in paragraph [0046] of Betge-Brezetz.

4

5   Referring to the second underlined portion of the above-reproduced passage, Betge-

6   Brezetz <u>distinguishes</u> between "technical parameters of the service" and "thresholds to be

7   guaranteed." Specially, paragraph [0046] teaches that the service level agreements (SLA)

8   includes both parameters and thresholds. Appellants concede that "thresholds to be guaranteed"

9   could be considered a SLA breach value. However, the remaining discussion within paragraph

10   [0046] after the second underlined portion does not refer to the "thresholds to be guaranteed."

11   Instead, the remaining discussion within paragraph [0046] focuses on "these parameters" and

12   "aggregation is based on adding different curves associated with each parameter."

13

14   When the Examiner makes the finding of fact that "Betge-Brezetz thus discloses a future

15   prediction of all *parameters*," the teachings within Betge-Brezetz being relied upon by the

16   Examiner are referring to "technical parameters of the service" – not the "thresholds to be

17   guaranteed" (e.g., SLA breach values). As noted above, Betge-Brezetz treats the "technical

18   parameters of the service" as being distinct from the "thresholds to be guaranteed." Thus, the

19   teachings relied upon by the Examiner do not refer to an example of a SLA breach value. As a

20   result, the Examiner's <u>Graham</u> findings of fact regarding the scope and content of Betge-Brezetz,

21   as they pertain to the claimed "estimated SLA breach value," are unsupported by substantial

22   evidence.

23

Claim 26

Dependent claim 24 recites, in part, the limitations of "the chart includes the historical performance data for the resource and a current SLA breach value setting." Regarding these limitations, on page 5 of the Fourth Office Action, the Examiner cited paragraphs [0070]-[0078] of Betge-Brezetz without comment. However, none of the Examiner's cited passages within Betge-Brezetz refer to (i) a chart; (ii) historical performance data for the resource; and (iii) a current SLA breach value setting. Paragraph [0078] teaches that "the invention allows the network manager to define the terms of the service level agreement (SLA)," but this is a generic teaching that does not refer to any of the specifics limitations immediately described above. Therefore, Examiner's Graham findings of fact regarding the scope and content of Betge-Brezetz, as to claim 26, are unsupported by substantial evidence.

Claim 31

Dependent claim 31 recites, in part, the limitations of "the historical performance data is based upon a single specific customer accessing the resource." Regarding these limitations, on page 7 of the Fourth Office Action, the Examiner cited paragraphs [0023]-[0026] of Betge-Brezetz without comment. Appellants have reviewed the Examiner's cited passages and have found no mention of "a single specific customer accessing the resource" or even of a "single specific customer." Therefore, Examiner's Graham findings of fact regarding the scope and content of Betge-Brezetz, as to claim 31, are unsupported by substantial evidence.

Claim 32

Dependent claim 32 recites, in part, the limitations of "identifying an SLA breach value trend based upon the historical performance data" and "predicting a future SLA breach value based upon the trend." Regarding these limitations, on page 7 of the Fourth Office Action, the Examiner cited paragraphs [0048]-[0050] and [0078] of Betge-Brezetz without comment. Appellants have reviewed the Examiner's cited passages and have found no mention of a SLA breach value trend being identified. Therefore, Examiner's Graham findings of fact regarding the scope and content of Betge-Brezetz, as to claim 32, are unsupported by substantial evidence.

THE REJECTION OF CLAIMS 39-44 UNDER 35 U.S.C. § 103 FOR OBVIOUSNESS BASED UPON NAGASAWA IN VIEW OF BETGE-BREZETZ AND MONGA

For convenience of the Honorable Board in addressing the rejections, claims 40-44 stand or fall together with dependent claim 39.

Claim 39

Dependent claim 39 recites, in part, the limitations of "generate, using a compliance percentage, the estimated SLA breach value." Regarding these limitations, on page 10 of the Fourth Office Action, the Examiner cited column 2, lines 15-35 of Monga while making the following Graham findings of fact regarding the scope and content of Monga:

Monga teaches "interact with a service provider to negotiate "replacement" services for a breach of the SLA, interact with various network elements to rectify a breach of the SLA, interact with the service provider to dynamically modify the SLA based upon changing user requirements") (emphasis added)

For ease of reference, the Examiner's cited passage within Monga is reproduced below:

1   In accordance with one aspect of the present invention, an optical service agent
2   manages service level agreements for a user. The optical service agent can perform both
3   real-time and off-line analysis for the user, and can interact with various network
4   elements (including the core optical communication network) to handle billing, penalty,
5   and other issues associated with a SLA breach. Among other things, the optical service
6   agent may monitor and analyze a connection in real-time for determining SLA
7   compliance, gather and maintain statistical information relating to a connection, analyze
8   the statistical information off-line for determining SLA compliance, patterns, and trends,
9   interact with a service provider to enforce penalty provisions in the SLA, interact with a
10   service provider to negotiate a credit for services not provided by the service provider in
11   accordance with the SLA, interact with a service provider to negotiate "replacement"
12   services for a breach of the SLA, interact with various network elements to rectify a
13   breach of the SLA, interact with the service provider to dynamically modify the SLA
14   based upon changing user requirements, and interface with a billing/accounting system to
15   provide SLA-related information.
16

17   Both the Examiner's stated analysis and cited passage fails to mention/teach the claimed

18   "compliance percentage." Every mention of the term "compliance" within the entirety of Monga

19   refers to "SLA compliance," in general, and not to a compliance percentage, as claimed. In fact,

20   the phrases "percent" and "percentage" are entirely absent from Monga. Thus, the Examiner's

21   findings of fact regarding the scope and content of Monga are unsupported by substantial

22   evidence.

23

24   Additionally, the claimed invention refers to generating an estimated SLA breach value

25   (i.e., an estimated SLA breach value that is proposed to be used with a SLA). Although the

26   Examiner's cited passage refers to "dynamically modify[ing] the SLA based upon changing user

27   requirements," this is not the same as proposing an estimate SLA breach value.

28

1   Conclusion

2   Based upon the foregoing, Appellants respectfully submit that the Examiner's rejections

3   under 35 U.S.C. §§ 101, 103 are not viable. Appellants, therefore, respectfully solicit the Honorable

4   Board to reverse the Examiner's rejections under 35 U.S.C. §§ 101, 103.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due under 37 C.F.R. §§ 1.17, 41.20, and in connection with the filing of this paper, including extension of time fees, to Deposit Account 09-0461, and please credit any excess fees to such deposit account.

Date: November 14, 2011   Respectfully submitted,

/Scott D. Paul/
Scott D. Paul
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CUSTOMER NUMBER 52023

VIII. CLAIMS APPENDIX

24. A computer hardware system for estimating a service level agreement (SLA) breach value for a resource, comprising:

a performance history database including historical performance data for the resource; and

at least one computer hardware device coupled to the performance history database, wherein the at least one computer hardware device is configured to:

retrieve the historical performance data for the resource, and

generate the estimated SLA breach value by processing the historical performance data for the resource.

25. The computer hardware system of claim 24, wherein

the at least one computer hardware device is configured to build a SLA.

26. The computer hardware system of claim 24, wherein

the at least one computer hardware device is configured to generate a chart,

the chart includes the historical performance data for the resource and a current SLA breach value setting.

27. The computer hardware system of claim 26, wherein

the at the at least one computer hardware device is configured to receive a proposed SLA breach value setting and regenerate the chart to included the proposed SLA breach value setting.

29. A method for estimating a service level agreement (SLA) breach value for a resource, comprising:

retrieving historical performance data for the resource from a performance history database;

generating, with a computer hardware system, the estimated SLA breach value by processing the historical performance data for the resource; and

displaying, using the computer hardware system, the estimated SLA breach value.

30. The method of claim 29, wherein

the historical performance data is based upon an aggregation of customers accessing the resource.

31. The method of claim 29, wherein

the historical performance data is based upon a single specific customer accessing the resource.

32. The method of claim 29, wherein

the generating comprises

identifying an SLA breach value trend based upon the historical performance data; and

predicting a future SLA breach value based upon the trend.

34. A machine readable storage having stored therein computer program code for estimating a service level agreement (SLA) breach value for a resource, the computer program code, which when executed by a computer hardware system, causes the computer hardware system to perform:

retrieving historical performance data for the resource from a performance history database;

generating, with a computer hardware system, the estimated SLA breach value by processing the historical performance data for the resource; and

displaying, using the computer hardware system, the estimated SLA breach value.

35. The machine readable storage of claim 34, wherein

the historical performance data is based upon an aggregation of customers accessing the resource.

36. The machine readable storage of claim 34, wherein

the historical performance data is based upon a single specific customer accessing the resource.

37. The machine readable storage of claim 34, wherein

the generating comprises

identifying an SLA breach value trend based upon the historical performance data; and

predicting a future SLA breach value based upon the trend.

39. The computer hardware system of claim 24, wherein

the at least one computer hardware device is configured to generate, using a compliance percentage, the estimated SLA breach value.

40. The computer hardware system of claim 24, wherein

the estimated SLA breach value is a predicted value by which a predetermined compliance percentage can be achieved by employing the estimated SLA breach value with a service level agreement associated with the resource.

41. The method of claim 29, wherein

the generating comprises

receiving a compliance percentage; and

computing said estimated SLA breach value based upon the compliance percentage.

42. The method of claim 29, wherein

the estimated SLA breach value is a predicted value by which a predetermined compliance percentage can be achieved by employing the estimated SLA breach value with a service level agreement associated with the resource.

43. The machine readable storage of claim 34, wherein

the generating comprises

receiving a compliance percentage; and

computing said estimated SLA breach value based upon the compliance percentage.

44. The machine readable storage of claim 34, wherein

the estimated SLA breach value is a predicted value by which a predetermined compliance percentage can be achieved by employing the estimated SLA breach value with a service level agreement associated with the resource.

IX. EVIDENCE APPENDIX

No evidence submitted pursuant to 37 C.F.R. §§ 1.130, 1.131, or 1.132 of this title or of any other evidence entered by the Examiner has been relied upon by Appellants in this Appeal, and thus no evidence is attached hereto.

X. RELATED PROCEEDINGS APPENDIX

A Decision on Appeal was rendered in the present Application on July 22, 2010, and is attached hereto. Since Appellants are unaware of any other related appeals and interferences, no other decision rendered by a court or the Board is attached hereto.

UNITED STATES PATENT AND TRADEMARK OFFICE

_____

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

_____

Ex parte JOSHUA S. ALLEN, BRYAN M. ELLINGTON,
BRADFORD AUSTIN FISHER, ROBERT L. NIELSEN, and
JACOB YACKENOVICH

_____

Appeal 2009-012564
Application 10/675,726
Technology Center 2400

_____

Before ALLEN R. MACDONALD, *Vice Chief Administrative Patent Judge*,
ROBERT E. NAPPI, and BRADLEY W. BAUMEISTER, *Administrative
Patent Judges*.

BAUMEISTER, *Administrative Patent Judge*.

DECISION ON APPEAL[1]

STATEMENT OF CASE

Appellants appeal under 35 U.S.C. §§ 6(b) and 134 from the
Examiner's rejection of claims 1-23. We affirm.

BACKGROUND

Appellants' invention relates to a service level management system
for a computer network that "can track services provided to customers and
compare the delivery of services to the service terms of a corresponding
[contractual service level agreement] SLA" (Spec. 3). Creating an "SLA
involves choosing the thresholds across which a breach of the SLA can be
identified," and at the time of the invention, "SLA breach values [were]
manually selected" (Spec. 3). Appellants' invention "addresses the
deficiencies of the art in respect to establishing an SLA breach value and
provides a novel an non-obvious method, system and apparatus for SLA
breach value estimation" (Spec. 4).

Claims 1, 6, and 15 are the independent claims on appeal, respectively
directed towards "[an SLA] breach value estimator," "a method for
estimating [an SLA] beach value," and "[a] machine readable storage having
stored thereon a computer program for estimating [an SLA] breach value."
Independent claim 1 is illustrative, reading as follows:

> 1. A service level agreement (SLA) breach value estimator
> comprising:
> a communicative coupling to data produced for at least
> one resource; and,
> a further communicative coupling to a user interface
> through which an SLA breach value estimate is proposed; and,
> at least one SLA breach value estimation process selected
> from the group consisting of an aggregated process, a specific

customer process, a customer resource subset process, and a
predictive process.

THE REJECTION UNDER 35 U.S.C. § 101

Claims 1-5 stand rejected under 35 U.S.C. § 101 as being directed
towards unpatentable subject matter (Ans. 3, 8). With respect to this
rejection, Appellants argue claims 1-5 together as a group (Br. 4).
Accordingly, we select independent claim 1 as representative. *See* 37 C.F.R.
§ 41.37(c)(1)(vii).

The Examiner notes that Appellants' Specification states, "'the
present invention can be realized in hardware, software or a combination of
both'" (Ans. 8 *citing* Spec. 12:3-4). The Examiner therefore finds that claim
1 is written broadly enough to be interpreted as being directed towards
software per se and, accordingly, concludes that claim 1 is not directed to
patentable subject matter (Ans. 8).

Appellants contend that the ordinary and customary definitions of the
term coupling indicate that a communicative coupling is a device and that
"the Examiner has <u>failed</u> to produce <u>any evidence</u> that the communicative
coupling is 'an abstract idea or software'" (Br. 5-6).

Appellants additionally assert that the Examiner's position "that a
claim must recite hardware elements to enable its functionality is not a
proper statement of the law" (Br. 4). But rather, "if the claims, under a
broadest reasonable interpretation, <u>could</u> require the use of a statutory
subject matter (e.g., a computer, a device, a product, etc.), then the claims
meet the requirements of 35 U.S.C. § 101" (*see* Br. 4-5, *citing In re
Comiskey* (Appeal No. 2006-1286 (Fed. Cir. Sep. 20, 2007))).

Issues

Appellants' arguments present the following issues:

1. Did the Examiner err in interpreting the term "communicative coupling" as reading on software *per se*?

2. Did the Examiner err in concluding that a claim written broadly enough to be interpreted as being directed to software *per se* is subject to rejection under 35 U.S.C. § 101 for being directed to patent ineligible subject matter?

Findings of Fact

The record supports the following Findings of Fact (Facts) by a preponderance of the evidence:

1. Definitions for "coupling" include "*Elect.* a. the association of two circuits or systems in such a way that power may be transferred from one to the other. b. a device or expedient to insure this." *Webster's Encyclopedic Unabridged Dictionary of the English Language*, p. 334 (1989).

2. Appellants state that "[t]he present invention can be realized in hardware, software, or a combination of hardware and software" (Spec. 12:3-4).

Principles of Law

During examination of a patent application, pending claims are given their broadest reasonable construction consistent with the Specification. *In re Am. Acad. of Sci. Tech Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004); *In re Prater*, 415 F.2d 1393, 1404-05 (CCPA 1969).

It is the Appellants' burden to precisely define the invention, not the USPTO's. *In re Morris*, 127 F.3d 1048, 1056 (Fed. Cir. 1997). Appellants always have the opportunity to amend the claims during prosecution, and

broad interpretation by the Examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. *In re Prater*, 415 F.2d 1393, 1404-05 (CCPA 1969).

A patent claim must be limited so as to exclude covering nonstatutory subject matter in order to avoid a rejection under 35 U.S.C. § 101. *Amgen, Inc. v. Hoechst Marion Roussel, Inc.*, 314 F.3d 1313, 1329 (Fed. Cir. 2003).

Analysis

The Examiner did not err in interpreting the term "communicative coupling" as reading on software per se. Appellants acknowledge that a coupling may be a device, a means of connecting, or a common part (Br. 5-6). A coupling may be additionally defined as "an association" or "an expedient to insure [that power may be transferred between electrical components]" (Fact 1). Appellants' Specification provides no express definition for the term "communicative coupling," and the Specifications' usage of the term "communicative coupling" (*see, e.g.,* Spec. 4, 8-9) does not exclude any of these potential common definitions. Moreover, Appellants have provided no rationale for why it would be improper to interpret software per se as any one of a device, a means of connecting, a common part, or an expedient to insure the transfer of electrical signals between electrical components. Rather, and as noted by the Examiner (Ans. 8), Appellants' Specification expressly states that "[t]he present invention can be realized in hardware, software, or a combination of hardware and software" (Fact 2). As such, we see no error in interpreting a "communicative coupling" as reading on software that either (1) gathers data that is produced for a resource, or alternatively (2) forwards breach value estimates to an appropriate user interface.

Turning to claim 1 as a whole, the Specification does not define what structure must be associated with an SLA breach value estimator (*see generally*, Spec.). Moreover, Appellants have not alleged that the term "estimator" denotes any commonly understood structure, much less have they provided any evidence in support of such an allegation (*see generally,* Br.). Nor have Appellants disputed that the last limitation, which is directed to "at least one SLA breach value estimation process," may be reasonably interpreted as reading on software per se. As such, the Examiner's interpretation that claim 1 reads on software per se is a reasonable one.

We now turn to the issue of whether the Examiner erred in concluding that a claim written broadly enough to be interpreted as being directed to software *per se* is subject to rejection under 35 U.S.C. § 101 for being directed to patent ineligible subject matter? We agree with the Examiner that a rejection under 35 U.S.C. § 101 is proper for such claims. Regardless of how Appellants may be interpreting various statements made by the Court of Appeals in *Comiskey* (*see* Br. 4-5), the law is clear that a patent claim that is broad enough to cover both statutory subject matter and nonstatutory subject matter is subject to rejection under 35 U.S.C. § 101. *Amgen, Inc. v. Hoechst Marion Roussel, Inc.*, 314 F.3d at 1329.

For the foregoing reasons, we find that the Examiner did not err in rejecting representative claim 1 under 35 U.S.C. § 101 as being directed to patent ineligible subject matter. Accordingly, we will sustain the Examiner's rejection of that claim as well as claims 2-5 which depend from claim 1.

THE REJECTION UNDER 35 U.S.C. § 102(e)

Claims 1-23 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Betge-Brezetz (US 2005/0177629 A1) (Ans. 3-11). With respect to this rejection, Appellants argue claims 1 and 5-23 together as a first group, dependent claim 2 individually as a second group, and dependent claims 3 and 4 together as a third group (Br. 6). Accordingly, we select independent claim 1 as representative of claims 1 and 5-23, and we select claim 3 as representative of dependent claims 3 and 4. *See* 37 C.F.R. § 41.37(c)(1)(vii).

CLAIM 1

Appellants note that claim 1 recites "a further communicative coupling to a user interface through which an SLA breach value estimate is proposed" (Br. 8), and they argue that the concept of a breach value estimate is absent from Betge-Brezetz (Br. 8-11). Appellants also argue that they are unclear as to where the cited prior art teaches at least one SLA breach value estimation process (Br. 10). More specifically, Appellants argue that the parameter estimates referred to in paragraph [0049] of Betge-Brezetz are in relation to a service level agreement usage predictive profile, but that these parameters being estimated are not disclosed as being SLA breach values. Rather, "these parameters are used to '[predict] customer requirements in terms of resources and/or services'" (Br. 10-11).

Appellants further argue that the Examiners anticipation rejection fails to comply with 37 C.F.R. § 1.104(c) because the Examiner has failed to clearly identify how the prior art's elements correspond to the individual claim elements (Br. 8). However, any question of whether the Examiner has complied with the requirements of 37 C.F.R. § 1.104(c) is not a matter

properly considered by the Board of Appeals and Interference in an appeal

under 35 U.S.C. § 134.

Issues

Appellants' arguments, then, raise the following issues:

1.   Does Betge-Brezetz disclose a communicative coupling to a user

interface through which an SLA breach value estimate is proposed?

2.   Does Betge-Brezetz disclose at least one breach value estimation

process?

Additional Findings of Fact

3.   [Betge-Brezetz's] invention allows the network manager to
        define better the terms of the service level agreements (SLA)
        that it has to enter into with its future customers, taking account
        of the existing network, and the terms of the service level
        agreements that it must enter into with its future customers after
        the network has been modified. . . .
              [T]he invention can also be used in the service creation
        and service offer phase effected by the operator of the network.
        Instead of varying the configuration of the existing network, it
        is possible to vary the definitions of the service level
        agreements to optimize the definitions of the service level
        specifications that can be supported by the existing network.

(¶¶ [0078], [0081]).

4.   Betge-Brezetz's processing system 1 includes a graphical user

interface 5 that includes first and second display modules 10, 15 (e.g., ¶¶

[0045], [0051], and [0063]; Fig. 2).

Analysis

Under at least one reasonable claim interpretation, Betge-Brezetz does

disclose a communicative coupling to a user interface through which an SLA

breach value estimate is proposed.

Appellants contend that claim 1 is directed to a device, as opposed to a process, and that a communicative coupling is also a device (Br. 4). Even accepting Appellants' position, though, the Specification still fails to expressly define or limit what devices may constitute a "communicative coupling." As such, it is reasonable to interpret this claim term as reading on any electrical communication means (e.g., cable, wire, bus, or trace), as well as, for example, any wireless, optical, or audible communication means, for transmitting information or electrical signals from one component to another (*see* Fact 1).

The claim limitation further requires that one end of this communicative coupling be "to a user interface." The rest of the claim limitation, "through which an SLA breach values estimate is proposed," recites the use intended for the claimed structure. However, nothing in claim 1 affirmatively sets forth any structure that accepts the breach value estimate (or data). Nor does claim 1 affirmatively recite any structure that links this data to any component that is capable of performing the subsequently recited "at least one SLA breach value estimation process." As such, the limitation "a further communicative coupling to a user interface through which an SLA breach value estimate is proposed" merely reads, for example, on a cable for various data input components that are capable of proposing SLA breach value estimates. That is, the contested limitation reads on, *inter alia*, a cable for a computer keyboard or mouse.

In that Betge-Brezetz discloses a communication network (*e.g.*, Abstract), one of ordinary skill in the art would understand Betge-Brezetz as implicitly disclosing the presence of computer keyboards and other user-interface input devices for the network. One of ordinary skill would further

understanding that such input devices have associated means, such as electrical cables, for communicatively coupling these input devices to the network. *See In re Preda*, 401 F.2d 825, 826 (CCPA 1968) (noting that "in considering the disclosure of a reference, it is proper to take into account not only specific teachings of the reference but also the inferences which one skilled in the art would reasonably be expected to draw therefrom").

We now turn to the last limitation of claim 1 and the issue of whether Betge-Brezetz discloses at least one SLA breach value estimation process. We find that it does.

Appellants' Specification refers to a "SLA breach value estimation process" in reference to a process for estimating or automatically selecting SLA breach values. However, the Specification does not expressly define or limit what is meant by the term "SLA breach value estimation process." Under the broadest reasonable interpretation, then, an SLA breach value estimation process could be interpreted to read on a process that employs SLA breach value parameters as data inputs for estimating other results, such as future network hardware or service requirements.

Appellants acknowledge that Betge-Brezetz generates a service level agreement usage predictive profile that estimates parameters for "'[predicting] customer requirements in terms of resources and/or services'" (Br. 10-11, *citing* Betge-Brezetz ¶ [0050]). That is, Betge-Brezetz predicts resource requirements based upon an analysis of service level agreement breach values. As such, the term "SLA breach value estimation process" of claim 1 is broad enough to read on the network planning proposal process of Betge-Brezetz.

Furthermore, even if "SLA breach value estimation process" is interpreted more narrowly as only meaning a process for estimating or SLA breach values, Betge-Brezetz still anticipates claim 1. Betge-Brezetz additionally states that such a process is an additional aspect of the invention (*see* Fact 3).

Claim 2

Claim 2 depends from claim 1 and further recites that "the estimator [of claim 1] is disposed within an SLA builder." Appellants allege that the Examiner is mischaracterizing the teachings of Betge-Brezetz in finding "that Betge-Brezetz 'discusses future service level agreements that will [be] created for future customers'" (Br. 12). The issue, then, is: does Betge-Brezetz discloses that it's system of configuring a communication network further creates or "builds" future service level agreements?

Appellants have not alleged that the term "SLA builder" has any art-recognized meaning (*see generally*, Br. 11-12). Nor does Appellants' Specification express define either what structural components constitute an SLA builder or what minimum functions an SLA builder must perform. Instead, the Specification generally sets forth that an SLA builder 110 is "configured to generate an SLA 130 based upon the performance of one or more resources 144" (Spec. 4). We understand, then, that an SLA builder can either be (1) fully automated, so as to automatically gather all requisite data and create or "build" an SLA without a human operator manually entering any data, or (2) partially automated, so as to create an SLA after a human operator manually enters at least some data into the computer.

Betge-Brezetz discloses that the invention can be used to create future service level agreements, (Fact 3). As such, the Examiner reasonably found that Betge-Brezetz's system constitutes or includes an SLA builder.

Claim 3

Dependent claim 3 states that "[t]he SLA breach value estimator of claim 1[ ] further compris[es] a graphical user interface *configured to render a chart of resource data over time derived from said produced data along with an indication of a current SLA breach value setting and a proposed SLA breach value setting*" (emphasis added). Appellants do not dispute that Betge-Brezetz discloses a graphical user interface (Br. 12-13). Rather, Appellants argue that the prior art's references "to future service level agreements do not inherently establish that these passage refer to a current SLA breach value setting and a proposed SLA breach value" (id.).

We need not decide, though, whether Betge-Brezetz's system actually renders a chart of resource data over time based upon, inter alia, current and proposed SLA breach value settings. The claim term "graphical user interface" reads on a computer monitor. The italicized portion of the claim language that follows "graphical user interface" (see *supra*) is directed towards the intended use of the graphical user interface. But claim 3 does not further recite any components (e.g., hardware or software) that actually cause the data to be rendered on the graphical user interface. That is, claim 3 only requires that the SLA breach value estimator of claim 1 further comprises a computer monitor that is capable of rendering the recited chart of resource data. *See, e.g., Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 909 F.2d 1464, 1468 (Fed. Cir. 1990) (noting "apparatus claims cover what a device is, not what a device does").

Turning to the cited art, Betge-Brezetz's processing system 1 includes a graphical user interface 5 that includes first and second display modules 10, 15 (Fact 4). Appellants do not dispute this fact. Nor do Appellants question whether Betge-Brezetz's graphical user interface, if provided with the appropriate computer instructions and data, would be *capable of* rendering a chart or resource data over time that is derived from produced data along with an indication of current and proposed SLA breach value settings. Accordingly, we sustain the Examiner's rejection of representative claim 3 as well as claim 4 which depends from claim 3.

DECISION

The Examiner's decision rejecting claims 1-23 is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1). *See* 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED

ke

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